

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D119-647 Rev. A AND  
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D119-647 REV. 0

REF FAA STC: SR00949SE

REF EASA STC: 10029107

REF CANADIAN LETTER OF ACCEPTANCE: C-11-0119, C-11-0120, C-11-0121

## 1.0 PURPOSE

The purpose of this Dart Service Instruction is to add the D119-647-013 Bearpaw Kit to this approval. The D119-647-013 Bearpaw Kit is designed to be compatible with D119-646-211/-212/-213/-214 Skidtubes equipped with training wearplates. The D119-647-013 Bearpaw Kit is also compatible with the D119-646-XXX Skidtubes equipped with standard wearplates/wearpads.

## 2.0 INSTALLATION

To install D119-647-013 Bearpaw Kit on Dart D119-646-XXX Skidtubes equipped with training wearplates refer to Figure 1 & 2 of this Service Instruction as well as the following:

- 2.1 Jack up the aircraft. Ensure the skidtubes are serviceable in accordance with ICA-D119-646.
- 2.2 Position D3034-3 Bearpaw on the aft end of each skidtube so that the bearpaw clamps are located on either side of the aft saddle as shown in Figure 1 of this Service Instruction. The Bearpaws should be installed over the training wearplates.
- 2.3 Attach the D2947 clamps with the hardware shown in Figure 2 of this Service Instruction. Additional AN960JD416 washers may be installed under the nuts to ensure 1.5-4 threads in safety on the bolts. Although not generally necessary, it is also acceptable to replace the AN4-23A bolts with longer or shorter AN4 bolts, if required.

CAUTION: The torque on the nuts should be limited to 20 in-lb (2.3 Nm)

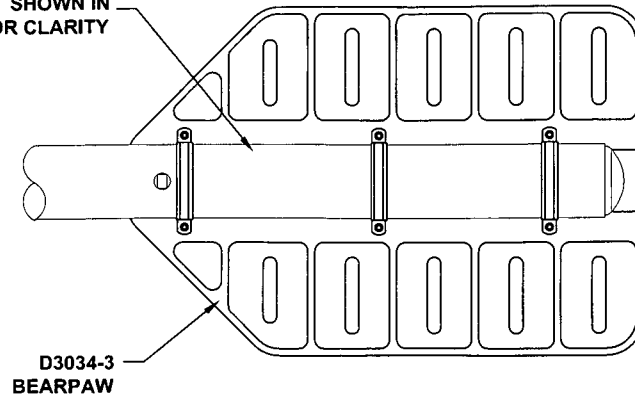
- 2.4 Lower the aircraft.
- 2.5 Update the aircraft log book to indicate installation of the D119-647-013 Bearpaw and adjust the empty weight and balance record for the rotorcraft with the information given in section 5.0 of this service instruction.

## 3.0 MAINTENANCE

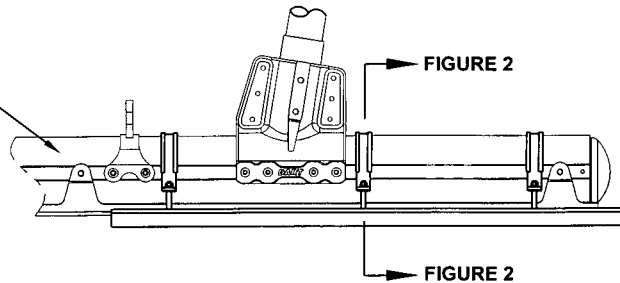
The D119-647-013 Bearpaw Installation should be maintained in accordance with ICA-D119-647.

B	REDESIGN OF D3034-3, UPDATED WEIGHT AND BALANCE, UPDATE BOLT LENGTH	AP	12.10.10
A	NEW ISSUE	AP	12.04.13
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	<b>DART AEROSPACE USA, INC</b> KENT, WA	
DRAWN	AP		
CHECKED	qp	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9607	SHEET 1 OF 3
APPROVED	140	TITLE	SCALE
DE APPR.	140	BEARPAW INSTALLATION	NTS
DATE	12.10.10	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

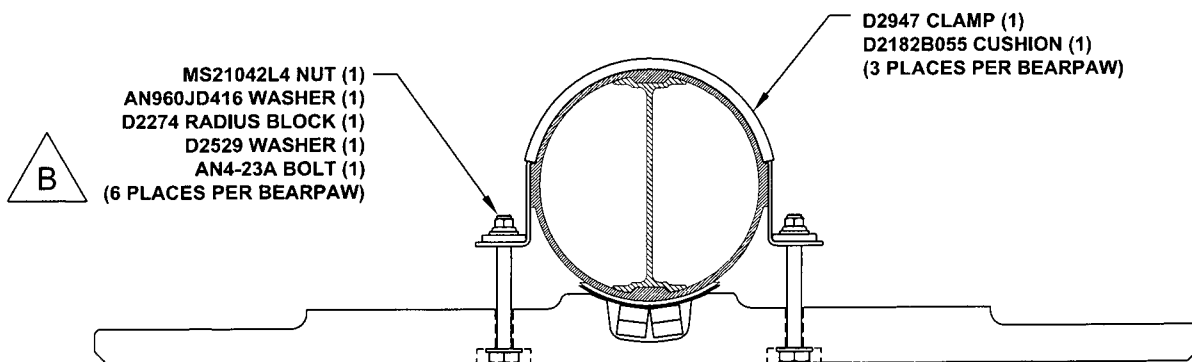
SADDLE NOT SHOWN IN  
THIS VIEW FOR CLARITY



D119-646-XXX  
SKIDTUBE  
WITH TRAINING  
WEARPLATES



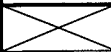
**Figure 1 - Bearpaw Location**



**Figure 2 - Bearpaw Installation**

DESIGN	AP	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AP	KENT, WA	
CHECKED	<i>AP</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9607	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	BEARPAW INSTALLATION	NTS
DATE	12.10.10	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

#### 4.0 PARTS LIST

QTY -013	PART NUMBER	DESCRIPTION
	D119-647-013	BEARPAW INSTALLATION
6	D2182B055	CUSHION
12	D2274	RADIUS BLOCK
12	D2529	WASHER
6	D2947	CLAMP
2	D3034-3	BEARPAW
12	AN4-23A	BOLT
12	AN960JD416	WASHER
12	MS21042L4	NUT



#### 5.0 WEIGHT AND BALANCE

INSTALLATION	WEIGHT	LATERAL		LONGITUDINAL	
		ARM	MOMENT	ARM	MOMENT
D119-647-013 Bearpaw Installation	17.6 lb 7.98 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	173.2 in 4.40 m	3048 in-lb 35.1 m-kg

DESIGN	AP	<b>DART AEROSPACE USA, INC</b> KENT, WA	
DRAWN	AP		
CHECKED	<i>qp</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9607	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	BEARPAW INSTALLATION	NTS
DATE	12.10.10	<small>COPYRIGHT © 2012 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	